

CLAIM(S)

What is claimed is:

1. A method for calibrating a color image output device having an image output engine, comprising the steps of:

5 outputting a predetermined image;
 selecting a bias color; and
 adjusting the image output engine based on the bias color.

2. The method of claim 1 further comprising selecting a bias intensity.

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3. The method of claim 1 further comprising providing a reference, the reference comprising a plurality of bias colors.

4. The method of claim 3 wherein the reference further comprises a plurality of
15 intensity levels

5. The method of claim 4 further comprising visually comparing the predetermined image with the reference.

20 6. The method of claim 1 wherein commands for performing the method are input via a control panel interface on the image output device.

7. The method of claim 1 wherein the commands for performing the method are input via a remote computer communicatively coupled to the image output device.

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8. The method of claim 1 wherein the bias color is selected from the group consisting of yellow, green, red, magenta, violet, blue, blue-green, and green.

9. The method of claim 8 wherein the image output device comprises means for

outputting the colors cyan, magenta, yellow and black to create an output color, the adjusting step further comprising mapping the bias color to the output color by adjusting at least one of the output colors.

5 10. The method of claim 1 wherein the predetermined image appears as a black and white image when the colors are balanced.

 11. A method for visually calibrating a color printer, comprising the steps of:
 providing an interface for receiving commands;
10 providing a color reference, the reference comprising a plurality of colors
 outputting a predetermined image;
 visually comparing the predetermined image with the reference;
 receiving a bias color selection; and
 adjusting the printer engine based on the bias color;
15 wherein the bias color selection is one of the plurality of colors from the color
reference.

 12. The method of claim 11 wherein the each of the plurality of colors of the color
reference further comprises a plurality of bias intensities, further comprising the step of
20 comprising selecting a bias intensity from the reference.

 13. The method of claim 11 wherein the interface is a control panel interface on the
color printer.

25 14. The method of claim 11 wherein the interface is implemented by a printer
driver on a remote computer communicatively coupled to the color printer.

 15. The method of claim 14 wherein the color reference is displayed on a monitor
coupled to the remote computer.

16. An image output device comprising:
means adapted to provide an interface for receiving commands;
means adapted to output a predetermined image;
5 means adapted to receive a bias color selection from a predetermined group of colors;
and
means adapted to adjust the printer engine based on the bias color and the bias
intensity.

10 17. The method of claim 16 wherein the means adapted to receive the bias color
selection further comprises means adapted to receive a bias intensity from a group
predetermined levels of intensities.

18. The method of claim 16 wherein the interface is a control panel interface on the
15 color printer.

19. The method of claim 16 wherein the interface is implemented by a printer
driver on a remote computer communicatively coupled to the color printer.

20 20. The method of claim 19 wherein the color reference is displayed on a monitor
coupled to the remote computer.

21. A computer program product having a computer readable medium having
computer program logic recorded thereon for producing an image, comprising:
25 means adapted to provide an interface for receiving commands;
means adapted to output a predetermined image;
means adapted to receive a bias color selection from a predetermined group of colors;
and
means adapted to adjust the printer engine based on the bias color and the bias

intensity.

22. The method of claim 21 wherein the means adapted to receive the bias color selection further comprises means adapted to receive a bias intensity from a group
5 predetermined levels of intensities.

23. A method for determining that an image output device is in an acceptable density range, the image output device having an image output engine, comprising the steps of:
10 outputting a predetermined image;
visually comparing the predetermined image with a reference;
selecting an adjustment parameter; and
adjusting the image output engine based on the adjustment parameter..

15 24. The method of claim 23 wherein the reference comprises a plurality of images, each image having a different background.

25. The method of claim 24 wherein the plurality of images has one image with a light background.

20 26. The method of claim 25 wherein the plurality of images has one image with a dark background.

27. The method of claim 26 wherein the image with a light background is the same
25 image as the image with the dark background.

28. The method of claim 26 wherein the predetermined image comprises a first image outputted with a light background and a first image with a dark background.

29. The method of claim 28 further comprising visually comparing the predetermined image with the reference by determining whether any details are missing from the first image with a light background and the first image with a dark background.

5 30. The method of claim 24 wherein commands for performing the method are input via a control panel interface on the image output device.

31. The method of claim 24 wherein the commands for performing the method are input via a remote computer communicatively coupled to the image output device.

10 32. The method of claim 24 wherein the adjustment parameter is selected from the group consisting of lighten, darken and no adjustment.

15 33. A image output apparatus, comprising
means adapted to output a predetermined image;
means adapted to select an adjustment parameter; and
means adapted to adjust the image output engine based on the adjustment parameter;
wherein the adjustment parameter is selected by a user comparing the predetermined image with a reference image.

20 34. The image output apparatus of claim 33 wherein the reference image comprising a plurality of images, each image having a different background.

25 35. The image output apparatus of claim 34 wherein the plurality of images has one image with a light background.

36. The image output apparatus of claim 35 wherein the plurality of images has one image with a dark background.

37. The image output apparatus of claim 36 wherein the image with a light background is the same image as the image with the dark background.

38. The image output apparatus of claim 37 wherein the predetermined image
5 comprises a first image outputted with a light background and a first image with a dark background.

39. The image output apparatus of claim 33 further comprising an interface wherein commands are input via a control panel interface.

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40. The image output apparatus of claim 24 wherein the adjustment parameter is selected from the group consisting of lighten, darken and no adjustment.

41. A computer program product having a computer readable medium having
15 computer program logic recorded thereon for producing an image, comprising:
means adapted to output a predetermined image;
means adapted to select an adjustment parameter; and
means adapted to adjust the image output engine based on the adjustment parameter;
wherein the adjustment parameter is selected by a user comparing the predetermined
20 image with a reference image.

42. The computer program product of claim 42 wherein the reference image comprising a plurality of images, each image having a different background.

25 43. The computer program product of claim 42 wherein the plurality of images has one image with a light background.

44. The computer program product of claim 43 wherein the plurality of images has one image with a dark background.

45. The computer program product of claim 44 wherein the image with a light background is the same image as the image with the dark background.

5 46. The computer program product of claim 45 wherein the predetermined image comprises a first image outputted with a light background and a first image with a dark background.

47. The computer program product of claim 44 further comprising a printer driver
10 on a remote computer, the printer driver comprising:

means adapted to send commands to the image output apparatus to produce the predetermined image;

means adapted to receive the adjustment parameters; and

15 means adapted to communicate the adjustment parameter to the image output apparatus.